UUU	UUU	EEEEEEEEEEEEEE	!!!!!!!!!!!!!!!!	PPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPP	\$	YYY YYY
UUU	UUU	EEEEEEEEEEEE	1111111111111111	РРГРРРРРРРР	SSSSSSSSSSSS	YYY YYY
UUU	UUU	EEE	111	PPP PPP	SSS	AAA AAA
UUU	UUU	EEE	111	PPP PPP	SSS	YYY YYY
UUU	UUU	EEE	111	PPP PPP	\$\$\$	YYY YYY
UUU	UUU	ĒĒĒ	ttt	PPP PPP	SSS	YYY YYY
UUU	UUU	ĒĒĒ	ŤŤŤ	PPP PPP	SSS	777 777
ŬŬŬ	ŬŬŬ	EEEEEEEEEE	ŤŤ	РРРРРРРРРРР	SSSSSSSS	YYY
UUU	ÜÜÜ	EEEEEEEEEEE	ŤŤŤ	PPPPPPPPPPP	SSSSSSSS	ŶŶŶ
UUU	UUU	EEEEEEEEEEE	ŤŤŤ	PPPPPPPPPPP	SSSSSSSS	ŶŶŶ
UUU	UUU	EEE	TTT	PPP	SSS	YYY
UUU	UUU	EEE	TTT	PPP	SSS	YYY
UUU	UUU	EEE	TTT	PPP	SSS	YYY
UUU	UUU	EEE	TTT	PPP	SSS	YYY
UUU	UUU	EEE	III	PPP	SSS	YYY
UUU	UUU	EEE	III	PPP	SSS	YYY
	UUUUUUUU	EEEEEEEEEEEEE	III	PPP	SSSSSSSSSSS	YYY
	UUUUUUU	EEEEEEEEEEEEE	III	PPP	22222222222	AAA
UUUUUUU	UUUUUUUU	EEEEEEEEEEEEE	111	PPP	SSSSSSSSSS	YYY

\$	AAAAAA AA AA AA AA		\$	\$	\$	44 44 44 44 44 44 44 44 44 44 44 44 44 44 44 44 44 44 44 44	000000 00 000 00 000 00 000 00 000 00 00
		\$					

S

SATSSS40 Table of	contents	SATS SYSTEM SERVICE TESTS SWAKE (SUCC S 16-SEP-1984 00:53:00	VAX/VMS Macro V04-00
(1) (1) (1) (1) (1) (1)	106 145 236 329 422 534	DECLARATIONS CONDITION TABLES TM SETUP, TM CLEANUP CONDITION SUBROUTINES - SETUP AND CLEANUP FORM CONDS VERIFY VFY_CLEANUP	

SATS SYSTEM SERVICE TESTS SWAKE (SUCC S 16-SEP-1984 00:53:00 5-SEP-1984 04:31:09 VAX/VMS Macro V04-00 [UETPSY.SRC]SATSSS40.MAR;1 (1)

> SATSSS40 SATS SYSTEM SERVICE TESTS SWAKE (SUCC S.C.) .TITLE

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: FACILITY: SYSTST (SATS SYSTEM SERVICE TESTS)

ABSTRACT:

1213145167189

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\*\*\*\*\*

THIS MODULE CONTAINS SUBROUTINES WHICH, WHEN LINKED WITH SUCCOMMON.OBJ, FORM TEST MODULE SATSSS40 TO TEST SUCCESSFUL OPERATION OF THE SWAKE SYSTEM SERVICE. THE SERVICE IS INVOKED UNDER VARIOUS INPUT CONDITIONS WITH VARYING INPUT PARAMETERS. ONLY SUCCESSFUL STATUS CODES ARE EXPECTED IN THIS TEST MODULE. CORRECT OPERATION OF THE SERVICE FOR EACH OF ITS ISSUANCES IS VERIFIED BY CHECKING FOR AN SS\$ NORMAL STATUS CODE, EXPECTED RETURN ARGUMENTS AND EXPECTED FUNCTIONALITY PERFORMED.

ENVIRONMENT: USER MODE IMAGE; NEEDS CMKRNL PRIVILEGE.
DYNAMICALLY ACQUIRES OTHER PRIVILEGES. AS NEEDED.

AUTHOR: THOMAS L. CAFARELLA,

CREATION DATE: OCT, 1977

MODIFIED BY:

VERSION 1.5: 25-MAY-79
LDJ 10/11/79 Fixed bug caused by DIB\$K\_LENGTH change ACG052.RNO mem 01

```
SATS SYSTEM SERVICE TESTS SWAKE (SUCC 5 4-SEP-1984 00:53:00 VAX/VMS Macro V04-00 Page 2)
DECLARATIONS 5-SEP-1984 04:31:09 [UETPSY.SRC]SATSSS40.MAR;1
```

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SATS SYSTEM SERVICE TESTS SWAKE (SUCC S 16-SEP-1984 00:53:00 VAX/VMS Macro V04-00 DECLARATIONS 5-SEP-1984 04:31:09 [UETPSY.SRC]SATSSS40.MAR;1
  00000000
0000
0009
0019
0039
0039
0051
0065
0084
0089
0098
0098
0098
                                           PSECT RODATA, RD, NOWRT, NOEXE, LONG
TEST_MOD_NAME:: STRING C, <SATSSS40> : TEST MODULE NAME
TEST_MOD_NAME_D: STRING I, <SATSSS40> : TEST MODULE NAME DESCRIPTOR
MSG1_INP_CTL: STRING I, < SSWAK! 4ZW: CONDITIONS:>
                                   FAO CTL STRING FOR MSG1 IN SUCCOMMON.MAR
                                                                                      STRING
                                           MSG3_ERR_CTL::
                                                                                                                                                          AS>
FAO CTL STRING FOR MSG3 IN SUCCOMMON.MAR
PROCESS & MBX NAME FOR CREATED PROCESS
SUTO6.EXE>; IMAGE NAME FOR CREATED PROC
INFINITE CPU
BYTE LIMIT FOR BUFFERED I/O
OPEN FILE COUNT LIMIT
PAGING FILE QUOTA
SUBPROCESS QUOTA
TIMER QUEUE ENTRY QUOTA
DEFINES END C° LIST
                                                                                                           I, <SATSSS40_CRE>
I, <SYSTST$RES:SAT
CPULM, 0
BYTLM, 512
FILLM, 2
PGFLQUOTA, 10
PRCLM, 2
TQELM, 3
                                           SUBJPRN:
IMAGNAM:
QUOTALIST:
                                                                                       STRING
STRING
$QUOTA
$QUOTA
                                                                                       SQUOTA
                                                                                       SQUOTA
                                                                                       SQUOTA
                                                                                       SQUOTA
                                                                                       SQUOTA
                                                                                                            LISTEND
```

SA

00000008 0000000C 00000074	00000 0000 0008 0000 0000 0000	91 93 94 96 96	PRIVMASK: MBXCHAN: MBXCHANINFO:	RWDATA, I BLKQ BLKL .LONG .ADDRESS	RD, WRT, NOEXE, LONG  1  DIB\$K_LENGTH  S .+4		ADDR OF PRIVILEGE MASK (IN PHD) CHAN. NO. FOR MAILBOX FOR CREATED PROCESS CHANNEL INFO RETURNED BY GETCHN	
00000074 00000014* 00000088 0000008C	0014 0088 0080	97	MBXUNIT: MBXBUFF:	.BLKB .BLKL STRING	DIBSK_LENGTH 0.120	:	SAVE AREA FOR MAILBOX UNIT NUMBER	
00000110 00000114 00000000 0000011C 00000120	010C 0110 0114 0118 011C	101	DEST_PIDADR: ZEROPID: SELFPID: CREPID: SUBJPID:	.BLKL .BUKL .LONG .BLKL .BLKL	0		MAILBOX BUFFER FOR CREATED PROCESS DESTINATION PID ADDR, WRITTEN BY S.S. PID OF ZEROES PID OF THIS PROCESS PID OF CREATED PROCESS PID OF SUBJECT PROCESS (SELF OR OTHER)	

SA RO RW SA

SA

SYYSYY TETTE THE THE VERY WORK

```
SATS SYSTEM SERVICE TESTS SWAKE (SUCC S 16-SEP-1984 00:53:00 VAX/VMS Macro V04-00 CONDITION TABLES SWAKE (SUCC S 16-SEP-1984 04:31:09 [UETPSY.SRC]SATSSS40.MAR;1
                                               .SBTTL CONDITION TABLES
                                              **** CONDITION TABLES FOR WAKE SYSTEM SERVICE ****
                                                           1,NOTARG, <PID ADDRESS>,-
<NOT SPECIFIED>,-
<SPECIFIED, NON-ZERO>,-
<SPECIFIED, ZERO>,-
                                              COND
00000000°
00000110°
                                                                  . ADDRESS
                                                                                     SUBJPID
                                                                  . ADDRESS
                                                                  . ADDRESS
                                                                                     ZEROPID
                                                           2.NOTARG. <PROCESS NAME ADDRESS>,-
<SPECIFIED>,-
<NOT SPECIFIED>,-
                                              COND
00000051
                                                                  . ADDRESS
                                                                                     SUBJPRN
                01B1
                                                                  .ADDRESS
                                              COND
                                                           3, NOTARG, < PROCESS TYPE> .-
                                                              <SELF>,-
<SUBPROCESS>,-
                                                              <DETACHED, DIFFERENT GROUP>,-
<DETACHED, SAME GROUP, SAME MEMBER>,-
<DETACHED, SAME GROUP, DIFFERENT MEMBER>,-
FFFFFFF
00000000
00000256
0000025A
0000025E
                                                                                     *XFFFFFFF ;
                                                                  . LONG
                                                                                                         PSEUDO-UIC
                                                                                                         PSEUDO-UIC
UIC
UIC
UIC
                                                                  .LONG
                                                                  .BLKL
                                                                  .BLKL
                                                                  .BLKL
                                              COND
                                                           4, NULL
                                                           5, NULL
                                              COND
         00000000
                                               .PSECT SATSSS40, RD, WRT, EXE
```

SA VA

Mai -50.50

384

The

MA

MODE

MOVL

MOVAL MODE PRIV

ADD ALL

; GET ALL PRIVILEGES

59 00000000°9F 69

DO

```
SATS SYSTEM SERVICE TESTS SWAKE (SUCC S 16-SEP-1984 00:53:00 VAX/VMS Macro V04-00 TM_SETUP, TM_CLEANUP 5-SEP-1984 04:31:09 [UETPSY.SRC]SATSSS40.MAR;1
SATSSS40
V04-000
                                                                                                                                                                SET PROCESS NAME
CHECK STATUS CODE RETURNED FROM SETPRN
GET MY PID
                                                                                                    SSETPRN S TEST MOD_NAME_D
SS_CHECK NORMAL
SWAKE_S SELFPID
SS_CHECK NORMAL
                                                                                                                                                                CHECK FOR NORMAL RETURN
                                                                                                                                                                UNDO ABOVE WAKE
                                                                                                    SHIBER S
                                                                                                    SS_CHECK NORMAL
                                                                                                                                                                CHECK FOR NORMAL RETURN
                                                                                         THE FOLLOWING CODE ESTABLISHES UIC'S IN THE CONDITION 3 TABLE
                                                                                                                  TO,20$,KRNL
a#SCH$GL_CURPCB,R9
PCB$L_UIC(R9),R9
FROM,Z0$
                                                                                                                                                             : KERNEL MODE TO ACCESS PCB
: GET CURRENT PCB ADDRESS
                                                                                                    MODE
                                                          DO
                                 00000000°9F
                                                                                                    MOVL
                                                                                                                                                             ; PICK UP UIC FROM PCB
                                         0080 09
                                                                                                    MOVL
                                                                                                                                                              : ... AND GET BACK TO USER MODE
                                                                                                    MODE
                                                                                         R9 NOW CONTAINS "MY" UIC
                                                                                                                  #2,R10 ; GET COND3 TABLE INDEX NUMBER INTO A REG #~X10000,R9,COND3_E[R10]; PUT DIFF GROUP UIC INTO 3RD TABLE ELT
                                                           9A
C1
                                 00010000 BF
                                                                                                    MOVZBL
ADDL3
                              0000024A'EF4A
                                                                                                   INCL R10

MOVL R9, COND3_E[R10] ; POINT TO 4TH COND3 TABLE ELEMENT

INCL R10

ADDL3 #1, R9, COND3 E[R10] ; PUT MY UIC INTO TABLE

POINT TO 5TH COND3 TABLE ELEMENT

PUT DIFF MEMBER UIC INTO THE TABLE

$CREMBX_S CHAN=MBXCHAN, LOGNAM=SUBJPRN, - ; GET MAILBOX FOR PROCESS

MAXMSG=#120, PROMSK=#0, BUFQUO=#240

SS CHECK NORMAL COMPLETION
                                                           D6
D0
D6
C1
                                                  59
5A
                     0000024A'EF4A
            0000024A'EF4A
                                         59
                                                  01
                                                                                                    SS_CHECK NORMAL
SGETCHN_S CHAN=MBXCHAN, -
PRIBUF=MBXCHANINFO
                                                                                                                                                             : CHECK NORMAL COMPLETION
: GET CHAN INFO (UNIT NUMBER)
                                                                                                    SS CHECK NORMAL : CHECK NORMAL COMPLETION MOVZWL MBXCHANINFO+8+DIB$W_UNIT MBXUNIT : SAVE MAILBOX UNIT NUMBER RSB : RETURN TO MAIN ROUTINE
         00000088'EF
                                  00000020'EF
                                                                                     TM_CLEANUP::
                                                                                                    SDELMBX_S MBXCHAN
BSBW MOD_MSG_PRINT
                                                                                                                                                             : DELETE TERMINATION MAILBOX
: PRINT TEST MODULE END MSG
                                                           30
                                              FDCF *
                                                                                                                                                              : RETURN TO MAIN ROUTINE
```

SATS SYSTEM SERVICE TESTS SWAKE (SUCC S 16-SEP-1984 00:53:00 VAX/VMS Macro V04-00 CONDITION SUBROUTINES - SETUP AND CLEANU 5-SEP-1984 04:31:09 [UETPSY.SRC]SATSSS40.MAR;1 Page

.SBTTL CONDITION SUBROUTINES - SETUP AND CLEANUP

**FUNCTIONAL DESCRIPTION:** 

CONDX AND CONDX CLEANUP ARE SUBROUTINES WHICH ARE EXECUTED BEFORE AND AFTER THE VERIFY SUBROUTINE, RESPECTIVELY, WHENEVER A NEW CONDITION X VALUE IS SELECTED (SEE FUNCTIONAL DESCRIPTION OF SUCCOMMON ROUTINE IN SUCCOMMON.MAR). ANY SETUP FUNCTION PARTICULAR TO THE CONDITION X TABLE IS INCLUDED IN THE CONDX SUBROUTINE AND CLEANED UP, IF NECESSARY, IN THE CONDX CLEANUP SUBROUTINE. THIS INCLUDES, ESPECIALLY, CODE TO DETECT CONFLICTS AMONG CURRENT ENTRIES IN TWO OR MORE CONDITION TABLES. IF A CONFLICT IS DETECTED. A NON-ZERO VALUE IS STORED INTO CONFLICT, WHICH CAUSES THE CALLING ROUTINE (SUCCOMMON) TO SKIP THE CURRENT ENTRY IN THE CONDITION X TABLE.

CALLING SEQUENCE:

BSBW CONDX BSBW CONDX\_CLEANUP WHERE X = 1,2,3,4,5

INPUT PARAMETERS:

CONFLICT = 0

IMPLICIT INPUTS:

R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.

**OUTPUT PARAMETERS:** 

CONFLICT SET TO NON-ZERO IF COND TABLE CONFLICT DETECTED.

IMPLICIT OUTPUTS:

R2.3.4.5.6 PRESERVED

COMPLETION CODES:

NONE

SIDE EFFECTS:

NONE

**COND1::** 

RSB COND1\_CLEANUP::

RSB COND2::

RSB COND2\_CLEANUP::

RSB

: RETURN TO MAIN ROUTINE

```
SATS SYSTEM SERVICE TESTS SWAKE (SUCC S 16-SEP-1984 00:53:00 CONDITION SUBROUTINES - SETUP AND CLEANU 5-SEP-1984 04:31:09
SATSSS40
V04-000
                                                                                                                                                            VAX/VMS Macro V04-00
[UETPSY.SRC]SATSSS40.MAR;1
                                                                                                                                                                                                                    (1)
                                                                               COND3::
                                                                         2934567899012345
222222233333335
                                                                                                                                                   NON-ZERO PID SPECIFIED ?
YES -- PROCESS IS 'OTHER'
IS PROCESS NAME SPECIFIED ?
NO -- SUBJECT PROCESS IS 'SELF'
DOES CONDITION 3 SPECIFY DIFFERENT GROUP ?
YES -- PROCESS NAME FOR DIFF GROUP IS CONF
NO -- MAKE SURE COND 3 SPECIFIES 'OTHER'
     0000016B'EF42
                               0000011C'8F
                                                                                                         #SUBJPID, COND1_E[R2]
                                                      D1355131311
                                                                                                          108
                                                                                            BEQLU
                                                                                                          CONDZ_E[R3]
                            0000G1AD'EF
                                                                                            TSTL
                                                                                            BEQL
                                              54
20
10
                                                                                                         R4.#2
20$
10$
                                      02
                                                                                             CMPL
                                                                                            BEQL
                                                                                            BRB
                                                                               58:
                                                                                 PROCESS IS "SELF"
                                                                                                         ONES, COND3_E[R4]
COND3X
20$
                                                                                                                                                 : DOES CONDITION 3 SPECIFY "SELF" ?
: YES -- THEN ALL 3 CONDIT'NS ARE CONSISTENT
: NO -- INDICATE CONFLICT 2 GET OUT
                                                      D1
13
11
     0000024A'EF44
                               00000000'EF
                                                                                            CMPL
                                                                         306
307
308
309
310
                                                                                            BEQLU
                                              0E
                                                                                            BRB
                                                                               105:
                                                                                  PROCESS IS "OTHER"
                                                      12
                                                                                                         ONES, COND3_E[R4]
COND3X
     0000024A'EF44
                               00000000'EF
                                                                                                                                                 : DOES CONDITION 3 SPECIFY "SELF" ?
: NO -- THEN ALL 3 CONDITIONS ARE CONSISTENT
                                              08
                                                                                            BNEQU
                                                                               205:
                                                      90
        00000000'EF
                               00000000'EF
                                                                                            MOVB
                                                                                                         ONES, CONFLICT
                                                                                                                                                 : YES -- INDICATE CONFLICT
                                                                               COND3X:
                                                      05
                                                                                                                                                 : RETURN TO MAIN ROUTINE
                                                                               COND3_CLEANUP::
                                                      05
                                                                                            RSB
                                                                                                                                                 : RETURN TO MAIN ROUTINE
                                                                               COND4::
                                                      05
                                                                                                                                                 ; RETURN TO MAIN ROUTINE
                                                                               COND4_CLEANUP::
                                                      05
                                                                                            RSB
                                                                                                                                                 : RETURN TO MAIN ROUTINE
                                                                               COND5::
                                                      05
                                                                                                                                                 : RETURN TO MAIN ROUTINE
                                                                               COND5_CLEANUP::
                                                      05
                                                                                            RSB
                                                                                                                                                 : RETURN TO MAIN ROUTINE
```

FD5B"

00BF

00000120'EF

00000000 EF 00

00000000°EF

00000000'EF

```
SATS SYSTEM SERVICE TESTS SWAKE (SUCC S 16-SEP-1984 00:53:00 VAX/VMS Macro V04-00 FORM_CONDS 5-SEP-1984 04:31:09 [UETPSY.SRC]SATSSS40.MAR;1
```

```
.SBITL FORM_CONDS
                              FUNCTIONAL DESCRIPTION:
                                                      FORM_CONDS FORMATS AND PRINTS INFORMATION ABOUT
                                THE CURRENT ELEMENT IN EACH OF THE CONDITION TABLES.
                              CALLING SEQUENCE:
                                        BSBW FORM_CONDS
                              INPUT PARAMETERS:
                                         NONE
                              IMPLICIT INPUTS:
                                        R2.3.4.5.6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.

FOR X = 1,2,3,4,5 :

CONDX_T - TITLE TEXT FOR CONDX TABLE

CONDX_TAB - ELEMENT TEXT FOR CONDX TABLE

CONDX_C - CONTEXT OF THE CONDX TABLE

CONDX_E - DATA ELEMENTS OF THE CONDX TABLE
                              OUTPUT PARAMETERS:
                                         NONE
                   IMPLICIT OUTPUTS:
                                        NONE
                              COMPLETION CODES:
                                        NONE
                              SIDE EFFECTS:
                                        NONE
                          FORM_CONDS::
                                        SFAO_S MSG1_INP_CTL,FAO_LEN,FAO_DESC,TESTNUM
                                                                                                    FORMAT CONDITIONS HEADER MSG
30
91
12
31
                                                      OUTPUT MSG #COND1 C. #NULL
                                                                                                     ... AND PRINT IT
IS CONDITION 1 NULL ?
                                         BSBW
                   378
379
380
381
382
383
384
385
                                         CMPB
                                         BNEQU
                                                       10$
                                                                                                    NO -- CONTINUE
                                                                                                    YES -- SUBROUTINE IS FINISHED
                                         BRW
                                                       FORM_CONDSX
                          105:
                                        MOVAL CONDITINSG A SAVE ADDRESS OF CONDITION 1 TITLE FOR FAO MOVE CONDITION 1 TITLE FOR FAO SAVE ADDRESS OF CONDITION 1 TITLE FOR FAO MOVB #CONDITION CONTROL SAVE CONDITION 1 CONTEXT FOR FAO MOV_VAL CONDITION CONDITION 1 CONTEXT FOR FAO GIVE COND 1 DATA VALUE TO FAO
DE
D0
90
```

SATSSS40 V04-000	SATS	SYSTEM_CONDS	SERVICE	TESTS SWAKE	C 2 (SUCC S 16-SEP-1984 5-SEP-1984	00:53:00 VAX/VMS Macro V04-00 Page 1 04:31:09 [UETPSY.SRC]SATSSS40.MAR;1	11
14 00 03 0096	30 91 12 31	02CB 02CE 02D1 02D3 02D6	386 387 388 389 390 201	BSBW CMPB BNEQU BRW	WRITE MSG2 #CONDZ_C,#NULL 20\$ FORM_CONDSX	FORMAT AND WRITE CONDITION 1 MSG IS CONDITION 2 NULL ? NO CONTINUE YES SUBROUTINE IS FINISHED	4
00000000'EF 00000177'EF 00000000'EF 0000018D'EF43 00000000'EF 00 FD09' 14 00 03	DE DO 90 90 30 91 12 31	02D6 02E1 02ED 02F4 02F7 02FA 02FC 02FF 03OA	391 392 393 394 395 396	MOVAL MOVB MOV VAL BSBQ CMPB BNEQU	COND2_T.MSG_A COND2_TABER3],MSG_B #COND2_C.MSG_CTXT COND2_C.COND2_EER3],M WRITE_MSG2 #COND3_C.#NULL 30\$	SAVE ADDRESS OF CONDITION 2 TITLE FOR FA SAVE ADDR OF COND 2 CURR TEXT ELT FOR FA SAVE CONDITION 2 CONTEXT FOR FAO SG_DATA1; GIVE COND 2 DATA VALUE TO FAO FORMAT AND WRITE CONDITION 2 MSG IS CONDITION 3 NULL? NO CONTINUE	10
006D 00000000'EF 000001B5'EF 00000000'EF 000001C3'EF44 00000000'EF 00	DE 00 90	02FF 02FF 030A 0316 031D	398 399 301 400 401 402 403 404	00.0014.6.1	FORM_CONDSX  COND3_T,MSG_A COND3_TABER4],MSG_B  #COND3_C,MSG_CTXT COND3_C,COND3_EER4],M WRITE_MSG2 #COND4_C,#NULL FORM_CONDSX COND4_T,MSG_A COND4_TABER51_MSG_R	: YES - SUBROUTINE IS FINISHED  : SAVE ADDRESS OF CONDITION 3 TITLE FOR FA : SAVE ADDR OF COND 3 CURR TEXT ELT FOR FA : SAVE CONDITION 3 CONTEXT FOR FAO ISG_DATA1 : GIVE COND 3 DATA VALUE TO FAO : FORMAT AND WRITE CONDITION 3 MSG	AO AO
00000000°EF 0000025E°EF 00000000°EF 0000025E°EF45 00000000°EF 14	30 91 13 DE DO 90	0316 031D 031D 0320 0323 0325 0330 033C 0343	401 402 403 404 405 406 407 408 409 410	MOVB MOV_VAL	#COND4 C.MSG CTXT COND4 C.COND4 FCR5].M	SAVE CONDITION 4 CONTEXT FOR FAC ISG_DATA1 : GIVE COND 4 DATA VALUE TO FAC	AO AO
00000000°EF 0000025F°EF 00000000°EF 0000025F°EF46 00000000°EF 14	30 91 13 DE DO 90	0343 0346 0349 0348 0256 0362	411 412 413 414 415 416 417	CMPB BEQLU MOVAL MOVAL	#CONDS C, #NULL FORM CONDSX CONDS T, MSG A CONDS TABER6], MSG B	IS CONDITION 5 NULL?  YES SUBROUTINE IS FINISHED  SAVE ADDRESS OF CONDITION 5 TITLE FOR FA  SAVE ADDR OF COND 5 CUPR TEXT ELT FOR FA  SAVE CONDITION 5 CONTEXT FOR FAO	AO AO
FC94°	05	0367 0367 036C 035C	418	BSBQ M_CONDSX: RSB	WRITE_MSG2	SG DATA1 : GIVE COND 5 DATA VALUE TO FAO ; FORMAT AND WRITE CONDITION 5 MSG ; RETURN TO CALLER	

```
458
460
465
465
465
467
477
477
477
477
```

SBTTL VERIFY

FUNCTIONAL DESCRIPTION:

VERIFY IS CALLED ONCE FOR EACH COMBINATION OF CONDITION TABLE VALUES (AS DETERMINED BY THE INDEX REGISTERS R2.3.4.5.6 FOR COND TABLES 1.2.3.4.5, RESPECTIVELY). VERIFY ESTABLISHES THE CONDITIONS SPECIFIED BY THE COND TABLES AND ISSUES THE SUBJECT SYSTEM SERVICE (\$WAKE). THEN, THE SUCCESSFUL OPERATION OF THE SERVICE IS VERIFIED BY EXAMINING THE STATUS CODE RETURNED, THE VALUES FOR RETURN ARGUMENTS AND THE FUNCTIONALITY PERFORMED. THE EXAMINATIONS TAKE THE FORM OF COMPARISONS AGAINST EXPECTED VALUES. ANY FAILING COMPARISON CAUSES AN ERR EXIT MACRO TO BE EXECUTED (EITHER DIRECTLY, OR INDIRECTLY, THROUGH THE SS CHECK MACRO): ERR EXIT SETS EFLAG TO NON-ZERO. PRINTS ERROR MESSAGES AND CAUSES AN IMMEDIATE RSB TO CALLER. WHEN ERR EXIT IS EXECUTED, FURTHER CALLS TO VEP1FY ARE SUPPRESSED, AND, AFTER EXECUTING CLEANUP SUBROUTINES, THE IMAGE EXITS.

CALLING SEQUENCE:

BSBW VERIFY

INPUT PARAMETERS:

NONE

IMPLICIT INPUTS:

R2.3.4.5.6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
FOR COND TABLES 1,2.3.4.5. RESPECTIVELY.

FOR X = 1,2,3.4.5:

CONDX E - ADDRESS OF TABLE OF DATA VALUES FOR CONDX
TABLE. IF THE CONTEXT OF TABLE X IS A SYSTEM SERVICE
ARGUMENT, THE ARGUMENT NAME MAY BE USED AS A SYNONYM
FOR CONDX E.

**OUTPUT PARAMETERS:** 

NONE

IMPLICIT OUTPUTS:

VERIFY HAS NO OUTPUT. SINCE ITS PURPOSE IS TO TEST FOR ERRORS, IT MERELY RETURNS TO CALLER NORMALLY AFTER THE TESTS, PROVIDING ALL WERE SUCCESSFUL; IF AN ERROR IS DISCOVERED, RETURN IS VIA AN ERR\_EXIT OR SS\_CHECK MACRO, BOTH OF WHICH DOCUMENT DETECTED ERRORS.

COMPLETION CODES:

EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.

SIDE EFFECTS:

SS CHECK AND ERR EXIT MACROS CAUSE PREMATURE EXIT (VIA RSB) IF ERROR ENCOUNTERED.

SATSSS40 V04-000		SATS	SYSTEM	SERVICE TEST	S SWAK	E 'SUCC S 16-SEP-1984 5-SEP-1984	00:53:00 YAX/VMS 04:31:09 LUETPSY	Macro V04-00 SRC]SATSSS40.MAR;1	Page 13 (1)
			036D 036D 036D 036D	479 : 480 481					
	00000000°EF 03 FFOB	95 13 30	036D 036D 036D 0373 0375	482 483 VERIFY:: 484 485 486	TSTB BEQL BSBW	CFLAG 58 FORM_CONDS	: NO CONTIN	TIONS BE PRINTED ? UE PRINT ALL CONDS FOR	R THIS T.C.
0000011C'EF 0000024A'EF44	00000114 EF 00000110 EF 00000000 EF 03 0074	D0 D4 D1 12 31	0378 0378 0383 0389 0395	479; 480 481 482 483 VERIFY:: 484 485 486 487 5\$: 488 489 490 491 492 493 7\$: 494 495 496 497	MOVL CLRL CMPL BNEQU BRW	SELFPID, SUBJPID ZEROPID ONES, COND3_E[R4] 78 108	; CLEAR ZERO P ; IS PROCESS F ; NO CONTIN	UBJECT PID IS SELF ID OR THIS TEST CASE SE UE CREATE A PROCESS	ELF ?
0000011C°EF	00000118°EF	DO	039A 039A 039A 039A 03D5 03D5	493 71: 494 495 496 497 498 499	SCREPRC	UIC=COND3 E[R4], IM QUOTA=QUOTALIST,MB) K NORMAL	: CREATE THE SI	UBJECT PROCESS SURE IT CREATED OK JCT PID = THE ONE JU	ICT FREATER
	00000118 EF 0000016B'EF42 000001AD'EF43	D0 D0	0403 040E 040E 041A	500 10 <b>\$</b> : 501 502	MOVL MOVL	CREPID, SUBJPID  COND1_E[P2], DEST_PIDA  COND2_E[R3], R9		ESS OUT OF TABLE INTO REG FOR INDIREC	
			0422	504 *****	SYSTEM	SERVICE CALL WHICH IS	THE SUBJECT OF T	HIS TEST CASE *****	•
00000000°EF	00000°8F 50 00000000°8F 00000°EF 50	D1 13 D0 D0	0422 0431 0438 043A 0445 0446 0499	500 10\$: 501 502 503 : 504 : ****** 505 506 507 508 509 510	CMPL BEQLU MOVL MOVL	PIDADR=@DEST_PIDADR, RO,#SS\$_NORMAL 18\$ #SS\$_NORMAL,EXPV RO,RECV T_LONG, <incorrect_state< td=""><td>: CODE RECEIVE</td><td>D = CODE EXPECTED ? NUE P EXPECTED AND VALUES, THEN EXIT FROM WAKE&gt;</td><td></td></incorrect_state<>	: CODE RECEIVE	D = CODE EXPECTED ? NUE P EXPECTED AND VALUES, THEN EXIT FROM WAKE>	
0000010C 'FF 00000000 'EF 00000000 'EF	0000010C'EF 66 0000011C'EF 0000011C'EF 0000010C'FF	D5 13 D1 13 D0 D0	04A1 04AC 04AE	512 18\$: 513 514 515 516 517 518	TSTL BEQL CMPL BEQL MOVL MOVL	DEST_PIDADR 20\$ SUBJPID, adest_PidadR 20\$ SUBJPID, expv adest_PidadR, recv	YES CONTIL	THE CORRECT ONE ?	
0000011C'EF	00000118'EF 37	D1 13	0489 0464 0507 0507 0512 0514 0518	519 520 20\$: 521 522 523 524 525 526 527 528 529 530	CMPL BEQLU SHIBER	T LONG, INCORRECT PID CREPID, SUBJPID 30\$	RETURNED BY WAKE>  WAS A PROCEST	S CREATED ? IT FOR IT TO COMPLET SUBJECT WAKE WITH H	TE HIBER
	57	11	0549 0548 0548 0548 0574 0574 05A2 05A2	525 526 30 <b>\$</b> :	BRB	VERIFYX	; AND GO E	XIT	
			054B 054B	528	2010n <sup>2</sup> 2	P1=MBXBUFF+8, P2=MBXE	UFF	ATED PROCESS TO SEND	MATI
			0574	530 531 VERIFYX	SS_CHEC	K NORMAL	CHECK FOR NO	RMAL STATUS CODE	, unit
		05	ÖŚÄŻ	531 VERIFYX	RSB		; RETURN TO CA	LLER	

SA

```
.SBTTL VFY_CLEANUP
FUNCTIONAL DESCRIPTION:
VFY CLEANUP EXECUTES SYSTEM SERVICES TO UNDO THE EFFECT OF THOSE ISSUED IN THE VERIFY SUBROUTINE. VFY CLEANUP MUST ASSUME THAT VERIFY MAY NOT HAVE EXECUTED IN ITS ENTIRETY (IF AN ERROR IS FOUND). ALSO, VFY CLEANUP MAY ISSUE SS CHECK OR ERREXIT ONLY AFTER PERFORMING ALL OF ITS CLEANUP OPERATIONS; THIS IS REQUIRED IN THE EVENT THAT VFY CLEANUP IS CALLED DURING ERROR PROCESSING, WHEN PERFORMING THE REQUIRED CLEANUP IS MORE IMPORTANT THAN POSSIBLY DISCOVERING A SECOND ERROR.
 CALLING SEQUENCE:
                    BSBW VFY_CLEANUP
 INPUT PARAMETERS:
                    NONE
 IMPLICIT INPUTS:
```

R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES

FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.

FOR X = 1,2,3,4,5:

CONDX E - ADDRESS OF TABLE OF DATA VALUES FOR CONDX

TABLE. IF THE CONTEXT OF TABLE X IS A SYSTEM SERVICE

ARGUMENT, THE ARGUMENT NAME MAY BE USED AS A SYNONYM FOR CONDX\_E.

**OUTPUT PARAMETERS:** 

NONE

IMPLICIT OUTPUTS:

NONE

COMPLETION CODES:

EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.

SIDE EFFECTS:

SS\_CHECK AND ERR\_EXIT MACROS CAUSE PREMATURE EXIT (VIA RSB) IF ERROR ENCOUNTERED.

0000011C'EF 00000118'EF

VFY\_CLEANUP:: CMPL CREPID, SUBJPID BNEQU VFY CLEANUPX \$DELPRC\_S SUBJPID VFY\_CLEANUPX:

: WAS A PROCESS CREATED FOR THIS TEST CASE ?
: NO -- JUST EXIT
: YES -- DELETE IT

SATS SYSTEM SERVICE TESTS \$WAKE (SUCC \$ 16-SEP-1984 00:53:00 VAX/VMS Macro V04-00 Page 15 5-SEP-1984 04:31:09 [UETPSY.SRC]SATSSS40.MAR;1 (1)

05 05BF 591 RSB ; RE 05C0 592 .END ; RE

; RETURN TO CALLER

SA

SATSSS40 Symbol table	SATS SYSTEM SERVICE TESTS	SWAKE (SUCC S 16-SEP-1984 5-SEP-1984	00:53:00 VAX/VMS Macro	0 V04-00 Page 16 SATSSS40.MAR;1 (1)
\$\$\$\$ \$\$\$CHARS \$\$\$CHARS1 \$\$\$CHARS2 \$\$\$CHARS3 \$\$\$CHARS4 \$\$\$CHARS5 \$\$\$COND A	= 000004CE R = 0000001E = 00000004 = 0000000A = 00000019 = 00000021 = 00000026 = 00000004	DIB\$W_UNIT EFLAG EXPV FAO_DESC FAO_LEN FORM_CONDS FORM_CONDS	= 0000000C ******* X 04 ******* X 04 ******* X 04 00000283 RG 04 0000036C R 04 0000036C R 04	
\$\$\$COND A \$\$\$\$TRINGS \$\$\$\$TRINGS2 \$\$T2 BYTE CFLAG CHMRTN	= 00000004 = 00000001 = 00000005 = 00000001 = 00000001 = 00000001 G	IMAGNAM IOS_READVBLK LONG MBXBUFF MBXCHAN MBXCHANINFO MBXUNIT MOD_MSG_CODE	= 00000004 G 0000008C R 00000008 R 0000000C R 00000008 R 00000008 R 000000019 R 000000039 RG 00000039 RG	
CHM CONT COMP_SC CONDT COND1_C COND1_C COND1_E COND1_H COND1_T COND1_T COND1_T COND1_T COND1_TAB	******* X 04  ******* X 04  ******* X 04  00000232 RG 04  00000000  00000233 RG 04  00000168 R 03  00000120 RG 03  00000120 R 03  00000120 R 03  00000120 R 03  00000120 R 03	MOD_MSG_CODE MOD_MSG_PRINT MSGT_INP_CTL MSG3_ERR_CTL MSG_A MSG_B MSG_CTXT NOTARG NULL	00000019 R 00000039 RG 00000000 G = 00000000 G = 00000014 G	
COND1_TAB COND2_C COND2_C COND2_CLEANUP COND2_E COND2_H COND2_T COND2_TAB	= 00000000 00000235 RG 04 000001AD R 03 0000018C RG 03 00000177 R 03	NULL ONES OUTPUT MSG PCB\$L_OIC PCV PHD\$Q PRIVMSK PQL\$_BYTLM PQL\$_CPULM PQL\$_FILLM PQL\$_LISTEND PQL\$_PGFLQUOTA	= 000000BC	
OND 3 COND 3 C COND 3 CLEANUP COND 3 E	00000236 RG 04 0000027D R 04 = 00000000 0000027E RG 04	PQLS-FILM PQLS-LISTEND PQLS-PGFLQUOTA PQLS-PRCLM PQLS-TQELM PRIVMASK PRIV ARGS PROCESS_ERR	= 00000000 = 00000003 = 00000004 = 000000006 = 000000000 = 000000007 = 0000000008 = 000000000000000000000000000000000000	
OND3_T OND3_TAB OND4 OND4_C OND4_CLEANUP OND4_H OND4_T OND4_TAB	0000024A R 03 000001C2 RG 03 000001B5 R 03 000001C3 R 03 0000027F RG 04 00000280 RG 04 0000025E RG 03 0000025E R 03 0000025E R 03 0000025E R 03	QUAD QUOTALIST RECV REST_REGS SAVE_REGS SCHSGL_CURPCB SELFPID	= 00000008 G 00000084 R 00000084 R 00000084 R 00000084 R 00000084 R 00000084 R 00000084 R 00000084 R 00000084 R 00000084 R 000000084 R 0000000084 R 0000000084 R 0000000084 R 000000084 R 0000000084 R 0000000084 R 0000000084 R 0000000084 R 00000000084 R 00000000084 R 0000000000000084 R 000000000000000000000000000000000000	
CONDS CONDS CLEANUP CONDS H CONDS T CONDS TAB CONFLICT	= 000001C3 R 03 0000027F RG 04 00000280 RG 04 0000025E RG 03 0000025E R 03 0000025E R 03 00000281 RG 04 00000281 RG 04 00000282 RG 04 0000025F RG 03 0000025F R 03	SUBJPID SUBJPRN SUCCESS	0000011C R 03 00000051 R 03 00000051 R 04 ********* GX 04 ********* GX 04 ********* GX 04 ********* GX 04	
CREPID CTLSGL_PHD DESC DEST_PIDADR DIBSK_LENGTH	00000118 R 03 = 00000010 G 03 = 00000010 R 03 = 00000074	SYSSCREMBX SYSSCREPRC SYSSDELMBX SYSSDELPRC SYSSFAO SYSSGETCHN SYSSHIBER	******* GX 04 ****** GX 04 ****** GX 04 ****** GX 04	

```
SATS SYSTEM SERVICE TESTS SWAKE (SUCC S 16-SEP-1984 00:53:00 VAX/VMS Macro V04-00 5-SEP-1984 04:31:09 [UETPSY.SRC]SATSSS40.MAR;1
SATSSS40
                                                                                                                                                                            17
Symbol table
SYSSQIOW
SYS$SETPRN
                                             *******
                                                         GX
SYS$SETPRV
                                             ******
SYS$WAKE
                                             ******
TESTNUM
                                             *******
TEST MOD NAME
TEST MOD NAME
TEST MOD SUCC
TMD ADDR
TM CLEANUP
TM SETUP
VERIFY
                                             00000000 RG
                                             00000009 R
                                             *******
                                             ******
                                            00000220 RG
00000000 RG
0000036D RG
000005A2 R
000005A3 RG
000005BF R
VERIFYX
VFY_CLEANUPX
WORD
                                          = 00000002
WRITE MSG2
ZEROPID
                                            *******
                                            00000110 R
                                                                  Psect synopsis
                                                                 +----+
PSECT name
                                           Ailocation
                                                                      PSECT No.
                                                                                    Attributes
                                           00000000
    ABS
                                                                      00
                                                                                    NOPIC
                                                                                               USR
                                                                                                                       LCL NOSHR NOEXE
                                                                                                                                                    NOWRT
                                                                                                                                                            NOVEC BYTE
SABS$
                                           00000000
                                                                                                                                                            NOVEC BYTE
                                                                      01
                                                                                    NOPIC
                                                                                               USR
                                                                                                       CON
                                                                                                               ABS
                                                                                                                       LCL
                                                                                                                            NOSHR
                                                                                                                                       EXE
                                                                                                                                                       WRT
                                           000000A7
00000260
000005C0
                                                                                                                                                    NOWRT NOVEC LONG
WRT NOVEC LONG
WRT NOVEC BYTE
                                                                                    NOPIC
NOPIC
                                                                                                       CON
                                                                                                               REL
                                                                                                                       LCL
RODATA
                                                                                               USR
                                                                                                                            NOSHR
RWDATA
                                                                                               USR
                                                                                                       CON
                                                                                                               REL
                                                                                                                       LCL
                                                                                                                            NOSHR
                                                                                                                                    NOEXE
SATSSS40
                                                                                    NOPIC
                                                                                               USR
                                                                                                       CON
                                                                                                               REL
                                                                                                                       LCL NOSHR
                                                                                                                                       EXE
                                                                                                                                               RD
                                                               Performance indicators
Phase
                                  Page faults
                                                      CPU Time
                                                                          Elapsed Time
                                           107
Initialization
Command processing
                                           295
Pass 1
```

00:00:00.33 00:00:02.45 00:00:15.63 00:00:00.83 00:00:00.76 00:00:00.14 00:00:00.04 00:00:00.00 00:00:00.06 00:00:00.68 00:00:08.90 00:00:00.75 00:00:02.15 00:00:00.12 00:00:00.03 Symbol table sort Pass 2 Symbol table output Psect synopsis output Cross-reference output Assembler run totals

The working set limit was 1350 pages.
46712 bytes (92 pages) of virtual memory were used to buffer the intermediate code.
There were 30 pages of symbol table space allocated to hold 487 non-local and 44 local symbols.
592 source lines were read in Pass 1, producing 24 object records in Pass 2.
46 pages of virtual memory were used to define 36 macros.

SAT

SATS SYSTEM SERVICE TESTS SWAKE (SUCC S 16-SEP-1984 00:53:00 VAX/VMS Macro V04-00 5-SEP-1984 04:31:09 [UETPSY.SRC]SATSSS40.MAR;1 SATSSS40 VAX-11 Macro Run Statistics Page 18 (1)

Macro library statistics

Macro library name

\$255\$DUA28:[SHRLIB]UETP.MLB:1
\$255\$DUA28:[SYS.OBJ]LIB.MLB:1
\$255\$DUA28:[SYSLIB]STARLET.MLB:2
TOTALS (all libraries)

Macros defined

884 GETS were required to define 33 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LISS:SATSSS40/OBJ=OBJS:SATSSS40 MSRCS:SATSSS40/UPDATE=(ENHS:SATSSS40)+EXECMLS/LIB+SHRLIBS:UETP/LIB

0423 AH-BT13A-SE

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